Notice of Allowability	Application No.	Applicant(s)	
	10/734,894	ONO ET AL.	
	Examiner	Art Unit	
	Hai C. Pham	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment filed 10/04/06*.

2. ☒ The allowed claim(s) is/are *1-5,7-9,14-20,22-24,29-35,37-39 and 44-57*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Claim 1 is patentable over the prior art of record because the image processing apparatus comprising an exposing device for exposing a thermally developable image forming material so as to form a latent image based on image data, a thermal developing device for thermally developing and visualizing the latent image on the exposed image forming material so as to form an image, a measuring device for measuring an image density of the image on the developed image forming material, a calibrating device for forming a table to define a relation between an image signal and image density based on a plurality of different test image data and measured image densities, a storing device for storing characteristic change model data indicating a characteristic change of the thermal developing device over time after starting of operation of the image processing apparatus, a difference calculating device to calculate, each time an image is formed based on an image signal corresponding to diagnostic image data, a density difference between an image density at a time at which the table was formed and an image density at a time at which the image is formed based on the image signal corresponding to the diagnostic image data, said calculation of the density difference being performed based on the characteristic change model data, and a correcting device for correcting the table based on the density difference calculated by the difference calculating device. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claim 5 is patentable over the prior art of record because the specific image processing apparatus comprises an exposing device for exposing a thermally developable image forming material so as to form a latent image on image data, a thermal developing device for thermally developing and visualizing the latent image on the exposed image forming material so as to form an image, a measuring device for measuring an image density of the image on the developed image forming material, a calibrating device for forming a table to define a relation between an image signal and an image density thereof based on a plurality of different test image data and measured image densities thereof, a storing device for storing passage-time film characteristic model data indicating a change over time of a characteristic of the image forming material after loading of the image forming material in the image processing apparatus and for storing result data obtained by exposing a part of the image forming material with a light quantity that corresponds to a predetermined density according to the table at a time of forming a diagnosis image and by measuring a density at said part of the image forming material, a difference calculating device to calculate, each time an image is formed based on an image signal corresponding to diagnostic image data, a density difference between an image density at a time at which the table was formed and an image density at a time at which the image is formed based on the image signal corresponding to the diagnostic image data, said calculation of the density difference being performed based on the passage-time film characteristic model data, a correcting device for correcting the table based on the density difference calculated by the difference calculating device, a first controlling device for controlling at least one of the

exposing device and the developing device so as to offset a characteristic change of at least one of the exposing device and the developing device, a first estimation device for calculating and keeping a characteristic change of the image forming material based on the stored result data, and a second controlling device for controlling a least one of the exposing device and the developing device based on the characteristic change of the image forming material calculated by the first estimation device instead of the stored passage-time film characteristic model data so as to offset the characteristic change of the image forming material. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claim 14 is patentable over the prior art of record because the specific image processing apparatus, which has all the limitations as recited in claim 1, further includes a second storing device for storing passage-time film characteristic model data indicating a change over time of a characteristic of the image forming material after loading of the image forming material in the image processing apparatus, and that the calculation of the density difference is performed based on the characteristic change model data and the passage-time film characteristic model data. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

Claim 46 is patentable over the prior art of record because the image processing apparatus includes an exposing device for exposing an image forming material so as to form a latent image on the image forming material based on image data, a developing device for developing and visualizing the latent image on the exposed image forming

material so as to form an image, a measuring device for measuring an image density of the image on the developed image forming material, a calibrating device for forming a table to define a relation between an image signal and an image density thereof based on a plurality of different test image data and measured image densities thereof, a storing device for storing passage-time film characteristic model data that indicates a change over time of a characteristic of the image forming material, a difference calculating device to calculate a density difference, based on the passage-time film characteristic model data, between an image density at a time at which the table was formed and an image density at a time at which an image is formed based on an image signal corresponding to diagnostic image data, and a correcting device for correcting the table based on the density difference calculated by the difference calculating device, wherein said storing device stores result data obtained by exposing a part of the image forming material with a light quantity that corresponds to a predetermined density according to the table at a time of forming a diagnosis image and by measuring a density on said part of the image forming material, and wherein the image processing apparatus further comprises a holder for holding the image forming material, a first controlling device for controlling at least one of the exposing device and the developing device so as to offset a characteristic change of at least one of the exposing device and the developing device, a third controlling device for controlling, during a predetermined period of time after loading the holder to the image processing apparatus, at least one of the exposing device and the developing device based on a difference between the density measured at said part of the image forming material and a predetermined

density for comparison, a second estimation device for calculating and keeping a characteristic change of the image forming material based on an amount of the control carried out lastly in said third controlling device and the stored result data, and a fourth controlling device for controlling, if the predetermined period of time after loading the holder to the image processing apparatus has elapsed, at least one of the exposing device and the developing device based on the characteristic change of the image forming material calculated by the second estimation device instead of stored passage-time film characteristic model data in so as to offset the characteristic change of the image forming material. The combined limitations as currently claimed are not taught by the prior art of record considered alone or in combination.

The method claims 16 and 31 are allowed because they all perform the processing steps associated with the functionality of the components of the image processing apparatus as claimed in claim 1.

The method claims 20 and 35 are allowed because they all perform the processing steps associated with the functionality of the components of the image processing apparatus as claimed in claim 5.

The method claims 29 and 44 are allowed because they all perform the processing steps associated with the functionality of the components of the image processing apparatus as claimed in claim 14.

The method claims 50 and 54 are allowed because they all perform the processing steps associated with the functionality of the components of the image processing apparatus as claimed in claim 46.

Claims 2-4, 7-9, 15, 17-19, 22-24, 30, 32-34, 37-39, 45, 47-49, 51-53 and 55-57 are allowed because they are dependent from claims 1, 5, 14, 16, 20, 29, 31, 35, 44, 46, 50 and 54 above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on (571) 272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hai Pham

HAI PHAM
PRIMARY EXAMINER

October 12, 2006